

**REMARKS**

This is in full and timely response to the Office Action mailed on July 25, 2008.

Claims 54-74 are present in the above-identified application, with claim 54 being independent. *No new matter has been added.*

Reexamination in light of the following remarks is respectfully requested.

**REJECTIONS UNDER 35 U.S.C. §103**

These rejections are traversed at least for the following reasons.

While not conceding the propriety of the rejections and in order to advance the prosecution of the present application, the rejected claims have been canceled.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

**NEWLY ADDED CLAIMS**

**Claims 54-74** - Claims 55-74 are dependent upon claim 54. Claim 54 is drawn to a surface treatment method comprising the steps of:

introducing a supercritical fluid into a treatment chamber, a supercritical substance combined with a co-solvent or reactant becoming said supercritical fluid,

wherein a liquid form of said supercritical substance is absent from within said treatment chamber.

The following description is provided for illustrative purposes and is not intended to limit the scope of the invention.

The supercritical substance herein is supplied in a gas form from the fluid supply source 19, wherein it is important to adjust the pressure/temperature control means 20 of the supercritical substance introduced into the treatment chamber 11, and to adjust the pressure of the inner atmosphere of the treatment chamber 11 using the heating means 27 and temperature control device 28, so as to prevent the supercritical substance from liquefying in the treatment chamber 11, or in other words, so as to convert the supercritical substance directly from gas into the supercritical fluid (Specification as originally filed at page 19, line 29, to page 20, line 8).

Because only the treatment using the supercritical fluid is carried out without using any liquid, it is also made possible for the surface of the substrate having the structural bodies formed thereon not to pass through the gas-liquid interface as described in the above, only by adjusting the temperature and pressure of the supercritical substance (Specification as originally filed at page 26, lines 17-22).

As a consequence, support for all claimed features and steps can be found within the specification as originally filed.

**U.S. Patent No. 6,277,753 (Mullee)** - Mullee discloses that pressure vessel 40 is then flushed for five to thirty seconds, preferably 10 seconds, with supercritical CO<sub>2</sub> and/or liquid CO<sub>2</sub> to remove all traces of remaining chemicals (Mullee at column 5, lines 4-7).

Thus, Mullee fails to disclose, teach, or suggest a method wherein a liquid form of said supercritical substance is absent from within said treatment chamber.

**U.S. Patent No. 6,242,165 (Vaartstra)** - Vaartstra arguably teaches that preferably, the temperature range used to remove organic material according to the present invention is in the range of about 30°C to about 250°C (Vaartstra at column 7, lines 54-56).

However, Vaartstra *fails* to disclose, teach, or suggest a method wherein a liquid form of said supercritical substance is absent from within said treatment chamber.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

### **OFFICIAL NOTICE**

There is no concession as to the veracity of Official Notice, if taken in any Office Action.

An affidavit or document should be provided in support of any Official Notice taken. 37 CFR 1.104(d)(2), MPEP § 2144.03. See also, *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989)(failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error).

### **EXTENSIONS OF TIME**

Please treat any concurrent or future reply, requiring a petition for an extension of time under 37 C.F.R. §1.136, as incorporating a petition for extension of time for the appropriate length of time.

**FEES**

The Commissioner is hereby authorized to charge all required fees, fees under 37 C.F.R. §1.17, or all required extension of time fees. If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

**CONCLUSION**

This response is believed to be a complete response to the Office Action.

Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of the dependent claims not explicitly addressed herein, in future papers.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

Dated: December 1, 2008

Respectfully submitted,

By 

Ronald P. Karanen

Registration No.: 24,104

Christopher M. Tobin

Registration No.: 40,290

RADER, FISHMAN & GRAUER PLLC

Correspondence Customer Number: 23353

Attorneys for Applicant